BEFORE THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION OF THE STATE OF MONTANA

The second secon

* * * * * * * * *

* * * * * * * * * *

IN THE MATTER OF THE APPLICATION)
FOR BENEFICIAL WATER USE PERMIT) FINAL ORDER
NO. 63456-s411 BY NORMAN R. BRUCE)

s a Six of a sear of

The time period for filing exceptions, objections, or comments to the Proposal for Decision in this matter has expired. No timely written exceptions were received.

Therefore, having given the matter full consideration, the Department of Natural Resources and Conservation hereby accepts and adopts the Findings of Fact and Conclusions of Law as contained in the Proposal for Decision of May 6, 1988, and incorporates them herein by reference.

WHEREFORE, based on the record herein, the Department makes the following:

ORDER

Application for Beneficial Water Water Use Permit No. 63456-s411 by Norman R. Bruce is hereby denied.

NOTICE

The Department's Final Order may be appealed in accordance with the Montana Administrative Procedure Act by filing a petition in the appropriate court within thirty (30) days after service of the Final Order.

DONE this $\frac{20^{\frac{11}{2}}}{20^{\frac{11}{2}}}$ day of $\frac{\sqrt{vne}}{\sqrt{vne}}$, 1988.

Gary Fritz, Administrator Department of Natural Resources and Conservation 1520 E. 6th Avenue Helena, Montana 59620-2301 (406) 444 - 6605

Peggy A Elting, Hearing Examiner
Department of Natural Resources
and Conservation
1520 E. 6th Avenue
Helena, Montana 59620-2301
(406) 444 - 6612

CERTIFICATE OF SERVICE

This is to certify that a true and correct copy of the foregoing FINAL ORDER was served by mail upon all parties of record at their address or addresses this 2 M day of 1988, as follows:

Norman R. Bruce 720 Gurnett Creek Townsend, MT 59644

James and Peggy Thompson Box 326 Gurnett Creek Townsend, MT 59644

John H. Jardine, Esq. P O Box 488 Whitehall, MT 59759

Round Grove Ranch Co, Inc. ATTN: Gloria O'Connell 642 Monroe Helena, MT 59601

T. J. Reynolds
Helena Field Manager
1520 East Sixth Avenue
Helena, MT 59620-2301
(inter-departmental mail)

Dale Reagor, Esq. Luxar and Murfitt P 0 Box 1144 Helena, MT 59674

Susan Howard Hearing Reporter

BB

PEFORE THE DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION OF THE STATE OF MONTANA

* * * * * * * * * *

FOR	PHE MATTER (BENEFICIAL 63456-s411	WATER	USE PE	ERMIT)	PROPOSAL	FOR	DECISION
	¥.	40	ote ≡ to	20.40 20.40 20.40 2		ope∎te		i i

Pursuant to the Montana Water Use Act and to the contested case provisions of the Montana Administrative Procedure Act, a hearing was held in the above-entitled matter on February 9, 1988.

Norman R. Bruce, the Applicant in this matter, appeared at the hearing in person, and by and through counsel John H. Jardine.

Ed Juvan, groundwater geologist and engineering consultant, appeared at the hearing as a witness for the Applicant.

Objectors James and Peggy Thompson appeared at the hearing in person, and by and through counsel Dale Reagor.

Objector Round Grove Ranch Co., Inc. appeared at the hearing by and through ranch owners Gloria O'Connell and Kelly Engles, and counsel Dale Reagor.

Richard Karp, consulting water resource engineer, appeared at the hearing as a witness for the Objectors.

James Beck, agricultural specialist with the Helena Water Rights
Bureau Field Office, appeared as staff expert witness for the
Department of Natural Resources and Conservation (hereafter, the
"Department").

EXHIBITS

The Applicant offered three exhibits for inclusion in the record in this matter:

Applicant's Exhibit 1 is a photocopy of a memorandum by Soil Conservation Service ("SCS") Area Engineer C. Sweeney, dated January 19, 1988. The memorandum details Mr. Sweeney's determination as to the amount of evaporation loss which could be expected as the result of the Applicant's proposed project.

Applicant's Exhibit 2 is a four-page photocopy of biographical data on Ed Juvan, detailing Mr. Juvan's qualifications and professional background.

Applicant's Exhibit 3 is the original of a letter to the Applicant from the Broadwater Conservation District, informing Mr. Bruce that the Conservation District Supervisors concur with a recommendation from the Montana Department of Fish, Wildlife, and Parks that only pure Westslope cutthroat trout be stocked in the Applicant's proposed pond, since the trout already present are of that species. (Letter dated June 16, 1986.)

Applicant's Exhibits 1 and 3 were accepted for the record without objection. An objection made to Applicant's Exhibit 2, based on it being repetitive of oral recitation of qualifications, was overruled and the Exhibit was accepted for the record.

The Objectors offered one exhibit for inclusion in the record in this matter:

Objectors' Exhibit 1 consists of a one-page computer printout of DNRC recorded claimed rights on Gurnett Creek, showing the claimed rights of the Objectors (and other claimants) to this source.

Objectors' Exhibit 1 was accepted for the record without objection.

The Department did not offer any exhibits for inclusion in the record in this matter. The Department file, which contains the originals of the Application and the Objections, correspondence between the Department and the parties, Department reports and processing documents, James Beck's March 2, 1987 Memorandum in this matter, and conditions proposed for purposes of settlement (April 7, 1987 Notice and Statement of Opinion sent to the Applicant by James Beck, with corresponding letters sent to the Objectors), was made available at the hearing for review by all parties. No party made objection to any part of the file. Therefore, the Department file in this matter is included in the record in its entirety.

Counsel for the Objectors requested that the record be left open for inclusion of a study of Gurnett Creek which he had been told existed. Counsel for the Applicant objected to the inclusion of such a study, arguing that inclusion would deny the parties the right of cross-examination. The Hearing Examiner left the record open for the information, pending location of such a study and a chance for counsel to review it and submit motions concerning its inclusion in the record.

The Hearing Examiner subsequently sent counsel photocopies of the relevant portions of a Water Resources Survey published in Broadwater County (1956), stating that the referenced page would be admitted into the record for the comment on creek conditions, but would be given little weight, unless counsel submitted responses to the contrary by February 29, 1988. (February 17, 1988 letter to

CASE # 63456 - 3 -

counsel Jardine, Reagor.) No responses were received; therefore, the referenced page was accepted for the record with the limitation specified.

The Hearing Examiner, having reviewed the record in this matter and being fully advised in the premises, does hereby make the following proposed Findings of Fact, Conclusions of Law, and Order.

FINDINGS OF FACT

- 1. MCA §85-2-302 states, in relevant part, "Except as otherwise provided in (1) through (3) of 85-2-306, a person may not appropriate water or commence construction of diversion, impoundment, withdrawal, or distribution works therefor except by applying for and receiving a permit from the department." The exceptions to permit requirements listed in §85-2-306 do not apply in this mater.
- 2. Application for Beneficial Water Use Permit No. 63456-s41I was duly filed with the Department of Natural Resources and Conservation on October 2, 1986 at 10:05 a.m.
- 3. The pertinent portions of the Application were published in the <u>Townsend Star</u>, a newspaper of general circulation in the area of the source, on November 6 and 13, 1986.
- 4. The source of water for the proposed appropriation is surface water from Gurnett Creek, a perennial stream.

5. The Applicant is requesting 150 gallons per minute ("gpm") up to 242 acre-feet of water per year for the filling and maintenance of a 2.6 acre-feet capacity onstream fish pond located in the E½ of Section 2, Township 8 North, Range 3 East, Broadwater County, Montana. The volume requested reflects a constant, year-round flow of 150 gpm.

Counsel for the Applicant stated that the requested flow rate of 150 gpm would only be used for filling the pond, with water needed thereafter to meet such losses as might occur to the pond through evaporation, seepage, or saturation. However, the Applicant testified that he is requesting a constant flow of 150 gpm because it appears that this amount is needed to keep the water fresh, and to protect his project against any upstream development. Taken as a whole, the evidence in the record indicates that the requested flow rate of 150 gpm would be appropriated consumptively only during fill and thereafter to make up losses; otherwise, the Applicant requires 150 gpm non-consumptive flow-through to maintain water quality.

6. The Applicant intends to construct a dam across the creek which would also be used as a road crossing. "Impervious" clay-type soils from a location upstream from the proposed pond site would be used. The road surface would be topped with clay and gravels. Hand-augering done by Ed Juvan at five points on the proposed abutment areas indicate that there is at least 6 feet of "plastic clays" on the surface of the site.

The Applicant testified that only preliminary engineering had been done since he has not yet obtained a permit, but that the dam designing and engineering will be done through the SCS, in full

CASE # 63456 - 5 -

accordance with SCS specifications. Witness Ed Juvan, who worked for SCS for more than 30 years, testified that the SCS would require the Applicant to install a principal spillway which is capable of handling 25-yr. frequency flood occurrences, an earthen spillway to handle higher flows, and most likely a trickle tube through the dam.

Mr. Juvan further testified that he has recommended the Applicant determine the depth of the clay materials and that, if the clays are not deep enough (10 feet) and impervious enough to keep water from reaching the bedrock, or if there is stratification in the alluvial area, the Applicant should install a drainage system at the dam and in the dam abutment areas to pick up seepage and discharge it back into the stream below the impoundment, and should incorporate a core trench in the dam to intercept water which would otherwise penetrate through the dam.

- 7. Department witness James Beck estimated that seepage through the dam would be "something less than 3 gpm." (March 2, 1987 Memorandum.) Mr. Juvan stated that any seepage through the structure which might occur could affect the dam structure, since dampening the clays which are proposed as the construction material weakens their resistance and affects the stability of the dam structure. Therefore, such seepage would have to be intercepted (see Finding of Fact 6, above).
- 8. The geology of the area proposed for the dam site has not been determined with certainty. Therefore, it is not possible to tell how much water would be lost to the creek through the kind of seepage referred to as "saturation", or if water would be lost to the aquifer through capture by a deeper aquifer.

All of the expert witnesses agreed that some volume of water would be required to saturate the area underlying the reservoir. However, there was disagreement among the witnesses as to the potential amount of water which would be lost to the creek flow, and whether or not the water would be permanently lost to the creek flow or would return to the creek in some amount.

James Beck estimated that water would saturate the zone around the reservoir to a depth of 60 feet (laterally at the sides, vertically under the bed), assuming that the area around the dam is impervious at about this depth based on the field investigation.

(See March 2, 1987 Memorandum, Figure 3.) In response to questioning, he testified that the greatest chance for error in his calculations of the reservoir's potential consumptive water use lies in the area of calculating the volume of materials to be saturated. He stated that there is a possibility that a larger amount of water than the estimated .79 acre-feet would be needed for saturation if lateral penetration is greater than 60 feet, and that more time than the estimated 185 days of saturation might be required. Mr. Beck testified that he does not know the underlying geology of the proposed reservoir site.

Ed Juvan, witness for the Applicant, testified he believes that the surface clay materials encountered during testing are underlaid with a thinly-bedded argillitic bedrock whose bedding planes will transmit some water laterally if the water is allowed into the rock. He stated that this water loss could be eliminated by intercepting the water with a drainage system (see Finding of Fact 6); however, water could be lost to the source if it reached bedrock

which was fractured at a steep angle, where the water could not be intercepted. Mr. Juvan testified that he would recommend that the proposed reservoir site be abandoned in favor of another location if there are stratified materials which extend to too great a depth. Mr. Juvan did not estimate the volume of water which might be lost to the creek through saturation of the reservoir site, but stated that the area of the proposed "right abutment" of the reservoir is already saturated by springs and would not require further saturation, and that he believes any saturation would result in water mounding around the reservoir which would result in water being released back into the creek during the irrigation season.

Richard Karp, witness for the Objectors, testified that not all of the water stored in the banks will be released back into the creek, since there will be increased plant use and evapotranspiration. He stated that additional water will also be used for saturation if the Applicant operates the reservoir by drawing it down to compensate for evaporation losses, in order to protect downstream rights, since the bank area exposed by drawdown will have to be resaturated on at least a yearly basis.

Mr. Karp further stated that the SCS soil survey for Broadwater County indicates that the proposed reservoir site is located at the intersection of two soil types, one of which (Lake Creek) tends to overlay fractured bedrock at fairly shallow levels. He hypothesized that although the abutment areas may be located in Loberg (clay) soil (as indicated by Mr. Juvan's hand-augering), some portion of the reservoir may overlay a fractured area, which poses the possibility of losses due to deep percolation.

CASE # 63456-8-

In response to Mr. Juvan's statement that the SCS soil survey is not location-specific enough to use as a basis for engineering a structure, since soil identification areas only are classified to the nearest 40 or 80 acres, Mr. Karp stated that there appears to be doubt concerning the geology of the site, since there is no firm information available.

9. Estimates of the amount of water which would be consumptively used by evaporation losses from the reservoir range from .4 acre-feet of water per year (Applicant's Exhibit 1) to 1.41 acre-feet of water per year (March 2, 1987 Memorandum by James Beck). Mr. Juvan testified that he agrees with the evaporation calculations made by Mr. Sweeney (Applicant's Exhibit 1), while Mr. Karp testified that he agrees with Mr. Beck's estimates on an average, meaning that evaporative losses will run higher approximately one-half the time.

Mr. Beck's evaporation estimates were calculated using the Meyer equation (see Memorandum, pages 1 and 2), which does not take into account the annual precipitation. Mr. Sweeney's calculation is based on an annual evaporation rate "extrapolated" from a U.S. Weather Bureau Report, with the average annual precipitation subtracted therefrom, a method which Mr. Juvan stated is standard procedure for government agencies when reviewing projects. Mr. Juvan concurred with Mr. Karp that, if the matter was a "scientific survey", not all precipitation could be used to compensate for evaporative losses, since a portion of the precipitation would make it into the stream as a part of the flow normally available to the water users on the creek.

10. The Objectors in this matter testified that they do not believe there is any unappropriated water in Gurnett Creek, and that seepage, saturation, and evaporation will cause losses to downstream water uses.

Jim Thompson testified that he has farmed and ranched on Gurnett Creek for 26 years, and that usually there is not water available past August to meet his irrigation rights. He stated that in three out of ten years, water isn't available to fill any of the Thompson rights past the most senior six rights on the stream (see Objectors' Exhibit 1), while they had to pump stockwater in January of 1988 because the creek was dry.

Kelly Engles testified that in 1985 and 1987, Round Grove Ranch was unable to get its first (senior) water right in full. He stated that in two years out of ten they are unable to get their full sixth right, in another two years out of ten they are unable to get the sixth right at all, and that the sixth right is only available until the middle of June. Mr. Engles testified that he believes the Applicant's project will cause evaporation and seepage losses to the stream system which will further complicate the supply difficulties of the downstream users.

11. The record in this matter does not provide any evidence of what amount of water, if any, is available in Gurnett Creek for appropriation.

The only estimate of the kind of flows which might be available in Gurnett Creek came from Objectors' witness Richard Karp, who based his estimate on Cabin Creek, a gaged stream in the area, which has recorded flows ranging from a high of 70 cfs to a low of 1 cfs.

Based on Cabin Creek, which has a larger drainage area, Mr. Karp stated that it appears all available water in Gurnett Creek is needed to fill the senior water rights. However, Mr. Karp's comparison of streams was discredited by Applicant's witness Ed Juvan, who testified that many more factors (such as watershed configuration, soil types, soil cover, and elevation) than Mr. Karp had taken into account need to be taken into account before an accurate comparison can be made. Mr. Juvan stated that comparisons of watersheds only yield generalities, not site-specific information; that accuracy often requires setting up a gauge at the site even if there's a gauge in the same watershed only a mile away.

Based on Mr. Juvan's testimony, it appears that Mr. Karp's comparison of Gurnett Creek with Cabin Creek cannot accurately be used to estimate flows in Gurnett Creek. However, neither the Applicant nor the Objectors, or the Department witness, provided any flow data or estimates of water availability in Gurnett Creek. Therefore, there is no evidence on the matter of water availability in the record in this matter.

Based upon the foregoing Findings of Fact and upon the record in this matter, the Hearing Examiner makes the following:

PROPOSED CONCLUSIONS OF LAW

1. The Department gave proper notice of the hearing, and all relative substantive and procedural requirements of law or rule have been fulfilled, therefore the matter was properly before the Hearing Examiner.

CASE # 63456 -11 -

- 2. The Department has jurisdiction over the subject matter herein, and all the parties hereto.
- 3. The Department must issue a Beneficial Water Use Permit if the Applicant proves by substantial credible evidence that the following criteria are met:
 - (1)(a) there are unappropriated waters in the source of supply:
 - (i) at times when the water can be put to the use proposed by the applicant;
 - (ii) in the amount the applicant seeks to appropriate; and
 (iii) throughout the period during which the applicant
 seeks to appropriate the amount requested is available;
 - (b) the water rights of a prior appropriator will not be adversely affected;
 - (c) the proposed means of diversion, construction, and operation of the appropriation works are adequate;
 - (d) the proposed use of water is a beneficial use;
 - (e) the proposed use will not interfere unreasonably with other planned uses or developments for which a permit has been issued or for which water has been reserved.
- 4. The proposed use of water, for fish and wildlife purposes, is a beneficial use of water. See MCA §85-2-102(2).
- 5. The Applicant in this matter has not provided substantial credible evidence that there are unappropriated waters in the source of supply.

"Unappropriated waters" are those waters which have not been diverted, impounded, withdrawn, or reserved for future use by a public agency. See generally MCA §85-2-102(1). Whether unappropriated waters are available in the source of supply may be determined on the basis of (a) whether there is water physically available at the Applicant's proposed point of diversion throughout the period of diversion, in at least some years (water is not unavailable due to being diverted, impounded, or withdrawn by upstream water users), and (b) whether the water which is physically available to the Applicant is legally available (not needed downstream to fulfill senior water users), and the Applicant therefore can utilize the requested amount of water throughout the period of appropriation in some years without being called upon by a senior user. See In the Matter of Application for Beneficial Water Use Permit No. 60662-s76G by Wayne and Kathleen Hadley (March 21, 1988 Proposal for Decision).

Even assuming <u>arquendo</u> that the Applicant's imposed reservoir site is not located in an area where fractured bedrock would cause loss of water to the source (<u>see</u> Findings of Fact 6, 8), the Applicant's project will "consumptively" use water for the initial fill, for saturation and any resaturation (<u>see</u> Finding of Fact 8), and through evaporation losses (<u>see</u> Finding of Fact 9). The magnitude of these losses to the stream has not been determined. However, at a minimum the Applicant must provide substantial credible evidence that unappropriated water is physically available for the smallest estimated consumptive use by the project, and for the 150 gpm flow-through which is needed to maintain water quality.

CASE # 63456-13-

(See Finding of Fact 5.) Since there is no information in the record in this matter on the amount of water, if any, which is available in Gurnett Creek (see Finding of Fact 11), there is no way to determine whether or not water is physically available for the Applicant's proposed appropriation.

Furthermore, there is no information in the record in this matter which indicates that there will be any year that the Applicant could divert the necessary amount of water, however small it might be, without being called upon by a senior water user. Testimony by the Objectors indicates that their claimed decreed water rights on Gurnett Creek are never completely filled during the irrigation season (see Finding of Fact 10). There is no evidence to show that there is any more water in Gurnett Creek in the winter than is necessary to meet the senior user's stockwatering needs.

Therefore, by not providing any evidence on the issue of water availability, the Applicant has failed to meet his burden of proof in this matter. The Applicant cannot claim undue surprise concerning the necessity of providing evidence on this issue, since the question of unappropriated water is set forth in the criteria of MCA §85-2-311, and since the issue was raised during the hearing in this matter. (See Finding of Fact 11.)

WHEREFORE, based upon the foregoing proposed Findings of Fact and Conclusions of Law, the Hearing Examiner makes the following:

PROPOSED ORDER

Application for Beneficial Water Water Use Permit No. 63456-s411 by Norman R. Bruce is hereby denied.

NOTICE

This proposal is a recommendation, not a final decision. All parties are urged to review carefully the terms of the proposed order, including the legal land descriptions. Any party adversely affected by the Proposal for Decision may file exceptions thereto with the Hearing Examiner (1520 E. 6th Ave., Helena, MT 59620-2301); the exceptions must be filed within 20 days after the proposal is served upon the party. MCA §2-4-623.

Exceptions must specifically set forth the precise portions of the proposed decision to which exception is taken, the reason for the exception, and authorities upon which the exception relies. No final decision shall be made until after the expiration of the time period for filing exceptions, and the due consideration of any exceptions which have been timely filed.

Any adversely affected party has the right to present briefs and oral arguments pertaining to its exceptions before the Water kesources Division Administrator. A request for oral argument must be made in writing and be filed with the Hearing Examiner within 20 days after service of the proposal upon the party. MCA §2-4-621(1). Written requests for an oral argument must specifically set forth the party's exceptions to the proposed decision.

CASE # 63456 -15-

Oral arguments held pursuant to such a request normally will be scheduled for the locale where the contested case hearing in this matter was held. However, the party asking for oral argument may request a different location at the time the exception is filed.

Parties who attend oral argument are not entitled to introduce evidence, give additional testimony, offer additional exhibits, or introduce new witnesses. Rather, the parties will be limited to discussion of the evidence which already is present in the record. Oral argument will be restricted to those issues which the parties have set forth in their written request for oral argument.

DONE this 6th day of May, 1988.

Peggy A./Elting, Hearing Examiner
Department of Natural Resources
and Conservation
1520 E. 6th Avenue
Helena, Montana 59620-2301
(406) 444 - 6612

CERTIFICATE OF SERVICE

Norman R. Bruce 720 Gurnett Creek Townsend, MT 59644

James and Peggy Thompson Box 326 Gurnett Creek Townsend, MT 59644 Round Grove Ranch Co, Inc. ATTN: Gloria O'Connell 642 Monroe Helena, MT 59601

T. J. Reynolds
Helena Field Manager
1520 East Sixth Avenue
Helena, MT 59620-2301
(inter-departmental mail)

Susan Howard
Hearing Reporter